



**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Inventor : Hoffmann et al.  
Assignee : Bayer CropScience GmbH  
Serial No. : 10/627,256  
Filed : July 24, 2003  
For : **4-TRIFLUOROMETHYLPYRAZOLYL-SUBSTITUTED PYRIDINES AND PYRIMIDINES**

**DECLARATION**

I, Martin Hills, state that I reside at – Am Itzelgrund 5b, 65510 Idstein, Germany – I am a citizen of the United Kingdom; that I am familiar with the subject matter and the prosecution of the instant application Serial No. 10/627,256 filed July 24, 2003, entitled 4-TRIFLUOROMETHYLPYRAZOLYL SUBSTITUTED PYRIDINES AND PYRIMIDINES. I am a graduate biologist (BSC hons.) and I have been working for more than 18 years in the field of agricultural chemistry. I state that I consider myself qualified by my education, knowledge and experience in agricultural chemistry to make this Declaration; and that I have made the following observations:

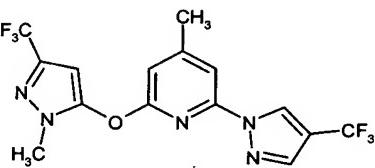
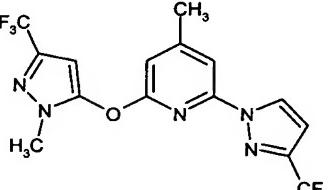
1. The instantly claimed invention is directed to novel herbicidally active compounds. In my opinion, the invention is clearly distinguishable from the compounds disclosed in the prior art.

2. The following tests have been carried out under my supervision and my control. Trials have been conducted in the same manner as described in the specification under pre-emergent conditions. The dosage of the herbicidally active compounds applied is given in each table. The herbicidal activity has been tested against several monocotyledonous and dicotyledonous weeds. The phytotoxic effects have been tested in rice and soy bean.

The abbreviations of weeds and crops herein denote:

|       |                        |       |                     |
|-------|------------------------|-------|---------------------|
| ABUTH | Abutilon theophrasti   | AMBEL | Ambrosia elatior    |
| DIGSA | Digitaria sanguinalis  | GALAP | Galium aparine      |
| LOLMU | Lolium multiflorum     | MATIN | Matricaria inodora  |
| POLCO | Fallopia convolvulus   | STEME | Stellaria media     |
| GLXMA | Glycine max (soy bean) | ORYSA | Oryza sativa (rice) |

Table 1: Pre emergent conditions

| compound   | dosage<br>g a.i. [ha] | ABUTH | AMBEL | GALAP | DIGSA |
|--|-----------------------|-------|-------|-------|-------|
| <br>no. 4.50 of present application | 25                    | 70%   | 70%   | 60%   | 80%   |
| <br>known from EP-A 1 101 764       | 25                    | 60%   | 60%   | 50%   | 60%   |

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Table 2: Post emergent conditions

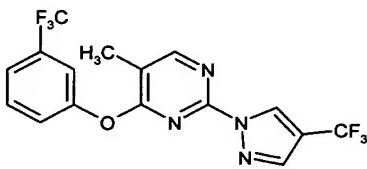
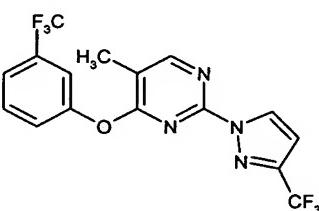
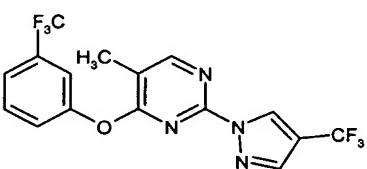
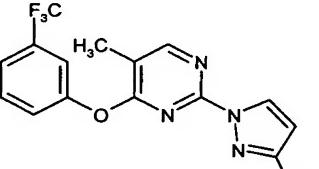
| compound  | dosage<br>g a.i. [ha] | herbicidal activity against |       |       | damages in<br>ORYSA |
|---|-----------------------|-----------------------------|-------|-------|---------------------|
|   |                       | ABUTH                       | LOLMU | POLCO |                     |
|  | 320                   | 100%                        | 100%  | 90%   | 0%                  |
| no. 1.7 of present invention  |                       |                             |       |       |                     |
|  | 320                   | 90%                         | 80%   | 70%   | 30%                 |
| known from WO 98/40379  |                       |                             |       |       |                     |

Table 3: Post emergent conditions

| compound  | dosage<br>g a.i. [ha] | herbicidal activity against |       |       | damages in<br>GLXMA |
|---|-----------------------|-----------------------------|-------|-------|---------------------|
|   |                       | STEME                       | GALAP | MATIN |                     |
|  | 320                   | 100%                        | 90%   | 100%  | 0%                  |
| no. 1.7 of present invention  |                       |                             |       |       |                     |
|  | 320                   | 90%                         | 80%   | 90%   | 60%                 |
| known from WO 98/40379  |                       |                             |       |       |                     |

3. In tables 1 to 3 two compounds according to present invention were tested against two prior art compound known from *Maier et al.* (EP-A 1 101 764) and *Selby et al.* (WO 98/40379). The comparison trials were conducted under pre- and post-emergent conditions in a greenhouse. The results of these comparison trials reveal that by applying the same dosage the compounds according to the invention show significantly higher herbicidal activity against several monocotyledonous and dicotyledonous weeds than the prior art compounds do. Furthermore, in spite of higher herbicidal activity the compounds according to the invention surprisingly cause less damages in crops such as rice and soy bean; see tables 2 to 3.

4. One skilled in the art would not have expected from the teaching of *Maier et al.* or *Selby et al.* that compounds of present invention would have higher herbicidal activity and at the same time would cause lower damages in crops. Therefore, it is my opinion that the instant invention is clearly different from and is not obviated by *Maier et al.* or *Selby et al.*.

I declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Dated this 26<sup>th</sup> day of January, 2007.

Signed: